SIERRA CLUB
CALIFORNIA

December 18, 2007

Honorable Alan Lloyd, Chair
Honorable Bob Epstein, Vice-Chair
c/o Steve Church
Economic and Technology Advancement Advisory Committee
California Air Resources Board
1001 I Street
Sacramento, CA 95812

RE: Sierra Club California Comments ETAAC Report Discussion Draft

Dear Drs. Lloyd and Epstein -

Sierra Club California is very appreciative of the comprehensive staff and committee work that has gone into the preparation of the *Economic and Technology Advancements for California Climate Solutions Discussion DRAFT*, released November 15, 2007. We endorse the Global Warming Action Committee's (GWAC) comments, presented at the November 29th workshop at University of California, Merced. We add some additional comments below, by sector.

Financial Sector/Carbon Trust

AB 32 requires that the Board study the potential impacts on community air quality of any market-based compliance mechanisms, before adopting any such mechanism. Should California adopt a mechanism that issues allowances to emit, it is vital that it require that all old and new sources of CO2 pay for the privilege of using limited carbon sinks. Either a cap-and auction system, where a fixed and gradually decreasing number of carbon permits are sold, or a carbon emission fee, set low at first but gradually increasing until our emission goals are met, could meet this test. Give-away carbon permit schemes, in which current emitters are permitted to turn their pollution into economically valuable rights, would violate this principle.

Market mechanisms must be designed so that they contribute to verifiable CO_2 reductions and work in harmony with other components of the climate change strategy, especially standards and incentives for promoting efficiency, conservation and renewable energy. Funds raised through the auction of carbon allowances should be used for public purposes such as energy efficiency, promotion of renewable energy, mitigation of electricity ratepayer impacts, needed infrastructure in impacted communities and job training opportunities in renewable energy generation for individuals working in the fossil-fuel energy generation industry.

Transportation Sector

The recommendations have strength in the variety of recommended approaches to greenhouse gas reductions, all of which will be needed in order to deal with global warming. The report could be strengthened further by attending to some of its key principles.

1. For example, ETAAC recommends that in addition to addressing GHG emissions associated with vehicle technologies, fuel carbon intensity, and transportation activity levels, CARB address the additional measures of conserving energy by lowering passenger and freight motor vehicle

miles traveled, lowering GHG emissions per mile traveled for each vehicle, and lowering the global warming effect of transportation energy. Energy efficiency is a key component of many of these measures, and should be emphasized up front and repeatedly.

2. We wholeheartedly agree with the stated principle that "Policies should aim for a level playing field." As stated within that section, considering both long-term goals and short-term needs "does not mean picking technology winners." Unfortunately, this report repeatedly emphasizes a particular technology -- hydrogen fuel-cell vehicles -- in its examples of the future. Given the technological immaturity, economic disadvantages, and greater inefficiency of hydrogen fuel-cell scenarios, this attempt to "pick a winner" raises concerns, and a more balanced discussion is needed.

3. Fair consideration must include comparisons of well-to-wheels or lifecycle efficiencies, emissions, and costs of vehicles and fueling infrastructure. This is especially important for long-term scenarios comparing zero-emission vehicles (ZEVs) that utilize renewable power (such as battery electric vehicles or fuel vehicles using hydrogen made via electrolysis). Taking this "big picture" approach in either the near- or long-term, hydrogen looks to be far from a winner, and ETAAC should not favor it over other more sensible options. In the long term, as we incorporate more emission-free fuels and vehicles, vehicle/fuel comparisons will need to move beyond emissions and incorporate metrics such as total energy requirements, economic efficiency, and societal costs.

4. We applaud CARB for discussing green labeling of vehicles and fuels, and encourage the inclusions of Energy Efficiency or Energy Expended in all labeling of vehicles, on a well-to-wheels basis. If you label fuel production/transmission/storage separately from vehicle use, consumers will not get the big picture of the results of their choices.

5. We encourage CARB to adopt additional General Policy Recommendations that move beyond RD&D, education, and coordination. Policies are needed to increase mechanisms for getting ZEVs and near-ZEV vehicles on the road as soon as possible, given the slow turnover in the vehicle fleet. Ramping up production will give manufacturers the economy of scale needed to change the vehicle fleet.

6. We support exploring all the strategies included under the heading "Conserving Energy by Reducing Passenger and Freight Motor Vehicle Miles." Under section H, "Low-speed modes of transportation," we encourage CARB to include among the "Possible Solutions" the idea that the state Legislature could increase the top speed allowed for Neighborhood Electric Vehicles from the present 25 mph to 35 mph, as has been adopted by the states of Washington and Montana. This would greatly increase the utility and acceptance of NEVs, and quickly yield GHG reductions.

7. In "Next Generation Transportation Energy", the report wisely mentions the synergies between energy sources that can be used for electricity use or as a vehicle energy source. Vehicle-to-grid synergies deserve explicit mention and consideration. The technology is available today to use BEVs and PHEVs for storing off-peak energy that can be fed back into the grid if needed, thus removing one of the biggest obstacles to further use of intermittent renewables like wind or solar power.

8. Electrifying freight rail -- as well as urban transit --provides multiple benefits of reduced carbon emissions, reduced dependence on tight oil supplies, and could be powered by sustainable electricity production.

Industry Sector

We support vigorous efforts toward Zero Waste, as waste elimination and recycling offers huge potential GHG reductions. Yet the report is silent on the proven advantages of composting and recycling technologies; instead, ETAAC has placed hope in a range of "conversion technologies." Despite the expenditure of millions of dollars, the state has yet to be able to quantify the health and environmental impacts of these technologies, so the emphasis on them is misplaced. ETAAC should be focused on GHG-reducing, recycling and composting technologies by recommending investing in programs and research that will ensure the backbone of our current recycling infrastructure will last despite regulatory challenges, siting problems, and artificially deflated landfill costs.

Energy Sector.

1. It does not appear that the recommended priorities correspond to the accepted loading order for electricity in California, which, according to CEC, is: 1. Conservation, 2. Efficiency, 3. Renewables, 4. Fossil fuels. Conservation and energy efficiency programs in California need to be massively scaled up. Independent providers, in addition to the traditional utility structure, should be engaged to accomplish this goal.

2. The proposed 33% RPS by 2020 should be enacted into law for all California utilities.

3. Community Choice Aggregation (AB 117) should be explicitly supported. We believe this alternative promises faster progress for renewables.

4. The substantial promise of California's geothermal power (with appropriate siting guidelines) should be highlighted.

Forestry Sector

Sec. II. It should be noted that the statistics cited for employment and payroll in the "forest and paper industry" appear to include a large amount of secondary manufacturing, such as furniture making. The number of people directly employed in forest management activities is closer to 4,000, with a payroll (according to the CA Forest Products Commission) of less than $50 million.

Sec. III & IV(B). When looking at "reforest[ing] areas that could naturally hold more trees" (page 7-3) it will be important to consider what stocking density is ecologically appropriate. For example, some areas in higher elevations could probably grow more trees, but that may not represent an ecologically appropriate stocking level.

Sec. IV(B). The Department of Forestry's timber harvest review program is a Certified Regulatory Program (CRP) under CEQA, but the adequacy of that program for reviewing environmental impacts has been the source of substantial ongoing controversy. The Department's CRP relies on an interagency review team which theoretically includes representatives of the Department of Fish and Game, the Regional Water Board and the California Geological Survey. However, budget limitations and competing staff priorities often limit the involvement of the other regulatory agencies, which can undermine the protection of water and wildlife resources. It is worth noting that the Department of Forestry and Fire Protection does not employ a single biologist, and review by the Department of Fish and Game is limited.

Sec. IV(D). Giving preference to "California Grown" forest products will continue to draw substantial public criticism and cynicism because of the California forest product industry's heavy reliance on clearcutting, and the ongoing plans of California's largest timber company to convert over a million acres of the Sierra Nevada to even-age plantations. Additionally, ongoing litigation by the California Forestry Association, attempting to remove California Endangered Species Act protections from coho salmon, undermines claims that California's timber industry is sufficiently ecologically sensitive to warrant special treatment.

Respectfully Submitted,

Bill Magavern

Bill Magavern
Senior Representative